

FIRST RECORD OF THE LONGFIN MAKU (*ISURUS PAUCUS*) FROM AUSTRALIAN WATERS. *Memoirs of the Queensland Museum* 38(2): 670. 1995:- The longfin mako *Isurus paucus* Guitart-Manday, 1966 is a poorly known epipelagic tropical and warm-temperate shark which has been most frequently documented from the western North Atlantic (Compagno 1984). It has also been recorded from the eastern North Atlantic, central, western and western North Pacific and the western Indian Ocean off Madagascar (Fourmanoir & Laboute, 1976; Compagno, 1984; Taniuchi, 1984) but probably has a more extensive distribution in warm seas than these records suggest. Compagno (1984) noted that it is probably taken regularly in the Japanese tropical pelagic longline fishery. Last & Stevens (1994), in their guide to the sharks and rays of Australia, commented that this species 'still remains unrecorded locally but almost certainly occurs in oceanic waters off northern Australia'.

The apparent rarity of this species may in part be due to confusion with the shortfin mako *Isurus paucus* Rafinesque, 1809 from which it differs principally in its longer pectoral fins (about as long as head length), ventral head coloration and slimmer body.

The longfin mako has been reported to reach a maximum length of 417cm total length (TL); the size at birth is about 97cm and males and females are mature by 245cm TL.

Between 24 July and 27 August 1994, observers who regularly monitor the catches of Japanese longliners inside the Australian Fishing Zone reported several longfin makos as follows: 24 July at 32°S, 154°E, ♂, approx. 230cm TL, surface water temp. (WT) 19.8-21.1°C; 14 August at 14°S, 149°E, approx. 200cm TL, WT 23.8-24.0°C; 16 August at 14°S, 148°E, approx. 200cm TL, WT 23.7-23.9°C; 27 August, at 15°16'S, 151°16'E, at a hook depth of 50-145m, WT 24.6°C; 9 September at 15°9'S, 150°18'E, ♀, 201cm TL, 56.5kg, hook depth 60-190m, WT 24.0°. Full proportional measurements are available from the senior author.

Photographs of one specimen confirmed their identification (D. Heran, Foreign Fishing Observer Station, pers. comm.). On 9 September 1994, a 201cm TL specimen (Fig. 1) was caught by a longliner and retained by the observer (M.Scott) onboard at the time. This shark was subsequently sent to Hobart, photographed and preserved in the collection of the Tasmanian Museum and Art Gallery (Registration Number TMD 2241). Proportional dimensions of this specimen (after Compagno 1984) have been compared with those from the Indo-Pacific and central Pacific (Garrick 1967) and eastern North Atlantic (Moreno & Moron 1992). The only significant differences are that in the Australian specimen, the pectoral fins were 103.7% of head length (measured to the

pectoral fin origin) compared to a mean value of 102.0% for Garrick's (1967) specimens and 95.5% for Moreno and Moron's (1992) fish. Furthermore the Australian individual appeared to have a shorter snout than other compared specimens, however, this could be due to differences in measuring technique.

Acknowledgements

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Fig. 1. *Isurus paucus*, ♀, 201cm TL, captured at 15°09'S, 150°18'E off eastern Australia.